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UNITED STATES DEPARTMENT OF AGRICULTURE
BUREAU OF BIOLOGICAL SURVEY

INSTRUCTIONS FOR MAKING A BIRD COUNT

In 1914 the Biological Survey began collecting data on the number of birds breeding in the United States. The work has been carried on during each succeeding year, with the aid of voluntary observers who have made counts of the birds nesting within selected areas. By continuing these counts some knowledge can be gained not only of our total bird population, but also of its fluctuations from year to year. Furthermore, the counts will greatly help in determining what effect the present State and Federal laws may have on the increase of game and insectivorous birds.

Many additional counts of this sort are desired, and each person receiving this pamphlet is invited to assist by making a count this summer of the pairs of birds nesting on some selected area or areas. In former years very satisfactory results have been obtained for the average farm conditions in the United States east of the Plains and north of North Carolina, and it is hoped that counts in this part of the country will be continued. It is especially desired also to obtain a series of counts indicating the bird life on the Plains, on the deserts (both with and without irrigation), and in the South Atlantic and Gulf States.

The height of the breeding season should be chosen for this work. In the latitude of Washington, D.C., --latitude 39°-- May 30 is about the right date for the first count; in the latitude of Boston the work should not begin until a week later; while south of Washington an earlier date should be selected. In any locality the count should be made soon after the end of the migration and during the early part of the nesting season.

What is wanted is a count of the pairs of birds actually nesting within the selected area. Birds that visit the area for feeding purposes only must not be counted, no matter how close their nests may be to the boundary lines.

In making this count, it is a good plan to begin at daylight some morning at the height of the nesting season and zigzag back and forth across the area, counting the male birds. Early in the morning every male bird is usually in full song, and at that season may safely be considered to represent a breeding pair. The results of one day's count should be checked and revised by several days of further work to make sure that every bird counted is actually nesting within the area and that no species has been overlooked.

The tract selected should represent the average farm conditions, and should not have an undue amount of woodland. It should contain not less than 40 acres --a quarter of a mile-square-- nor more than 80 acres, and should include the farm buildings, with the usual shade trees, orchards, etc., as well as fields of plowed land and of pasture or meadow.

The final results of the count should be sent to this Bureau as soon afterward as convenient, and should be accompanied by a statement of the exact boundaries of the selected area, so explicitly defined that it will be possible 25 years hence to have the count repeated. The name of the present owner should be given, together with a careful description of the character of the land, including a statement of whether it is dry upland or moist bottom land; the number of acres in each of the principal crops, or in permanent meadow, pasture, orchard, swamps, roads, etc.; the kinds of fencing used; and the amount of brush along fences, streams, roads, or in permanent pasture.

If there is an isolated piece of woodland comprising 10 to 20 acres conveniently near, a separate count of the birds nesting therein also will be useful. In this case the report, in addition to specifying the size and exact boundaries of the area, should state the principal kinds of trees and whether there is much or little underbrush.

A third count desired is of some definite timbered area --40 acres for instance-- which is part of a much larger tract of timber, either deciduous or evergreen.

Still a fourth count, supplementary to these, is needed. The average farm in the Northeastern States contains about 100 acres, and the average count hitherto has been of the birds nesting on the 50 acres of the farm nearest to and including the farm buildings. It is now necessary to obtain counts of the remainder of the farm, the wilder part containing no buildings, especially on the same farms where counts about the buildings have already been made.

Furthermore, counts on any other kinds of land are much desired for comparison.

Persons who have made counts in previous years are requested to repeat the work on the same areas. New areas selected should be such as are not likely to have their physical conditions much changed for a number of years. If succeeding annual counts show changes in bird population, it will thus be known that they are not due to changed environment.

The several kinds of counts are needed for a study of the relative abundance of birds under changing or stationary conditions. It is hoped that many persons interested in bird life will make one or more counts this season. As the department has no funds to pay for this work, it must depend wholly on voluntary observers. A supply of report blanks will be furnished on request. Requests for these should be addressed to--

Chief, Bureau of Biological Survey,
U.S. Department of Agriculture,
Washington, D.C.

Jan. 22.

UNITED STATES DEPARTMENT OF AGRICULTURE
BUREAU OF BIOLOGICAL SURVEYINSTRUCTIONS FOR MAKING A BIRD COUNT

In 1914 the Biological Survey began collecting data on the number and distribution of the birds breeding in the United States. The work has been carried on during each succeeding year, with the aid of voluntary observers who have made counts of the birds nesting on selected areas. By continuing these counts through a term of years, some knowledge can be gained not only of the total of our bird population but also of its fluctuations from year to year. Moreover, the counts will greatly help in determining what effect the present State and Federal laws may have on the increase of game and insectivorous birds.

Many additional counts of this sort are needed, and each person receiving this leaflet is invited to assist by making a count this summer of the pairs of birds nesting on some selected area or areas. It is hoped that counts on all land where they have previously been made will be continued, and it is especially desired to obtain also a series of counts indicating the bird life on the Plains, on the deserts (both with and without irrigation), and in the Southern and Western States.

The height of the breeding season should be chosen for this work. In the latitude of Washington, D. C.,--latitude 39°--May 30 is about the right date for the first count; in the latitude of Boston the work should not begin until a week later; while south of Washington an earlier date should be selected. In any locality the count should be made during the early part of the nesting season, but not before the end of the migration. If the work is done too early there is danger of counting as nesting some individuals which will go farther north to breed.

What is wanted is to learn how many pairs of birds actually nest within the selected area. Birds that visit the area only for feeding purposes must not be counted, no matter how close their nests may be to the boundary line.

In making this count, it is a good plan to begin at daylight some morning at the height of the nesting season and zigzag back and forth across the area, counting the male birds. Early in the morning every male bird is usually in full song, and at that season may safely be considered to represent a breeding pair. The results of one day's count should be checked and revised by several days of further work to make sure that all birds counted are actually nesting on the area and that no species has been overlooked. In the case of species in which the two sexes are nearly or quite alike, special care should be taken that only one is counted as representing the pair.

The tract selected should represent the average farm conditions, and should not have an undue amount of woodland. It should contain not less than 40 acres--a quarter of a mile square--nor more than 80 acres.

The final results of the count should be sent to this Bureau as soon afterward as convenient, and should be accompanied by a statement of the exact boundaries of the selected area, so explicitly defined that it will be possible 25 years hence to have the count repeated. The name of the present owner should be given, together with a careful description of the character of the land, including a statement of whether it is dry upland or moist bottomland; the number of acres in each of the principal crops, in permanent meadow, pasture, orchard, swamps, roads, etc.; the kinds of fencing used; and the amount of brush along fences, streams, roads, or in permanent pasture. It is often of much value in studying the results to have information as to the character of the land surrounding the area counted, whether cultivated, meadow, woods, etc.

If there is an isolated piece of woodland comprising 10 to 20 acres conveniently near, a separate count of the birds nesting therein also will be useful. In this case the report, in addition to specifying the size and exact boundaries of the area, should state the principal kinds of trees and whether there is much or little underbrush.

A third count desired is of some definite timbered area--40 acres, for instance--which is part of a much larger tract of timber, either deciduous or evergreen.

Still a fourth count, supplementary to these, is needed. The average farm in the Northeastern States contains about 100 acres, and the average count hitherto has been of the birds nesting on the 50 acres of the farm nearest to and including the farm buildings. It is now necessary to obtain counts also of the remainder of the farm, the wilder part containing no buildings, especially on the same farms where counts about the buildings have already been made.

Besides these, counts on any other kinds of land are much desired for comparison.

Persons who have made counts in previous years are requested to repeat the work on the same areas. It might be well to have new areas selected, such as are not likely to have their physical conditions much changed for a number of years, so that if succeeding annual counts show changes in bird population, it will be known that they are not due to changed environment. On the other hand, there is much to be learned regarding the adaptation of birds to changes of environment; therefore, any given area on which reports can be made year after year may be chosen, even though conditions are likely to change.

The several kinds of counts are needed for a study of the relative abundance of birds under changing or stationary conditions. It is hoped that many persons interested in bird life will make one or more counts this season. As the department has no funds to pay for this work, it must depend wholly on voluntary observers. A supply of report blanks will be furnished on request. An addressed envelope requiring no postage is inclosed herewith.

